

perhaps dose frequency, will also vary according to age, body weight, condition and response of the individual patient.

It should be noted that the attending physician would know how to and when to terminate, interrupt or adjust therapy to lower dosage due to toxicity, or adverse effects. Conversely, the physician would also know how to and when to adjust treatment to higher levels if the clinical response is not adequate (precluding toxic side effects).

Any suitable route of administration may be used. Dosage forms include tablets, troches, cachet, dispersions, suspensions, solutions, capsules, patches, and the like. See, Remington's Pharmaceutical Sciences.

In practical use, the compounds of the present invention, alone or in combination with other agents, may be combined as the active in intimate admixture with a pharmaceutical carrier or excipient, such as beta-cyclodextrin and 2-hydroxy-propyl-beta-cyclodextrin, according to conventional pharmaceutical compounding techniques. The carrier may take a wide form of preparation desired for administration, topical or parenteral. In preparing compositions for parenteral dosage form, such as intravenous injection or infusion, similar pharmaceutical media may be employed, water, glycols, oils, buffers, sugar, preservatives, liposomes, and the like known to those of skill in the art. Examples of such parenteral compositions include, but are not limited to dextrose 5% w/v, normal saline or other solutions. The total dose of the compounds of the present invention, alone or in combination with other agents to be administered may be administered in a vial of intravenous fluid, ranging from about 1 ml to 2000 ml. The volume of dilution fluid will vary according to the total dose administered.

The invention also provides for kits for carrying out the therapeutic regimens of the invention. Such kits comprise in one or more containers therapeutically effective amounts of the compounds of the present invention, alone or in combination with other agents, in pharmaceutically acceptable form. Preferred pharmaceutical forms would be in combination with sterile saline, dextrose solution, or buffered solution, or other pharmaceutically acceptable sterile fluid. Alternatively, the composition may be lyophilized or dessicated; in this instance, the kit optionally further comprises in a container a pharmaceutically acceptable solution, preferably sterile, to reconstitute the complex to form a solution for injection purposes. Exemplary pharmaceutically acceptable solutions are saline and dextrose solution.

In another embodiment, a kit of the invention further comprises a needle or syringe, preferably packaged in sterile form, for injecting the composition, and/or a packaged alcohol pad. Instructions are optionally included for administration of composition by a physician or by the patient.

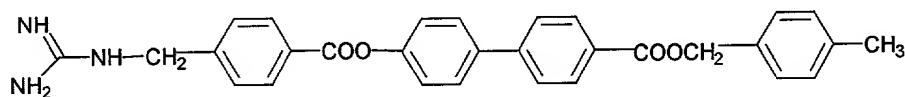
F. Examples

Example 1. Synthesis of a series of novel anti-*H. pylori* compounds

Since its discovery in 1983, in the mucus linings of the stomachs of patients with chronic gastritis, scientists have made detailed studies of *H. pylori*. Strong evidence exists to support the hypothesis that *H. pylori* may cause ulcers in the stomach and duodenum.

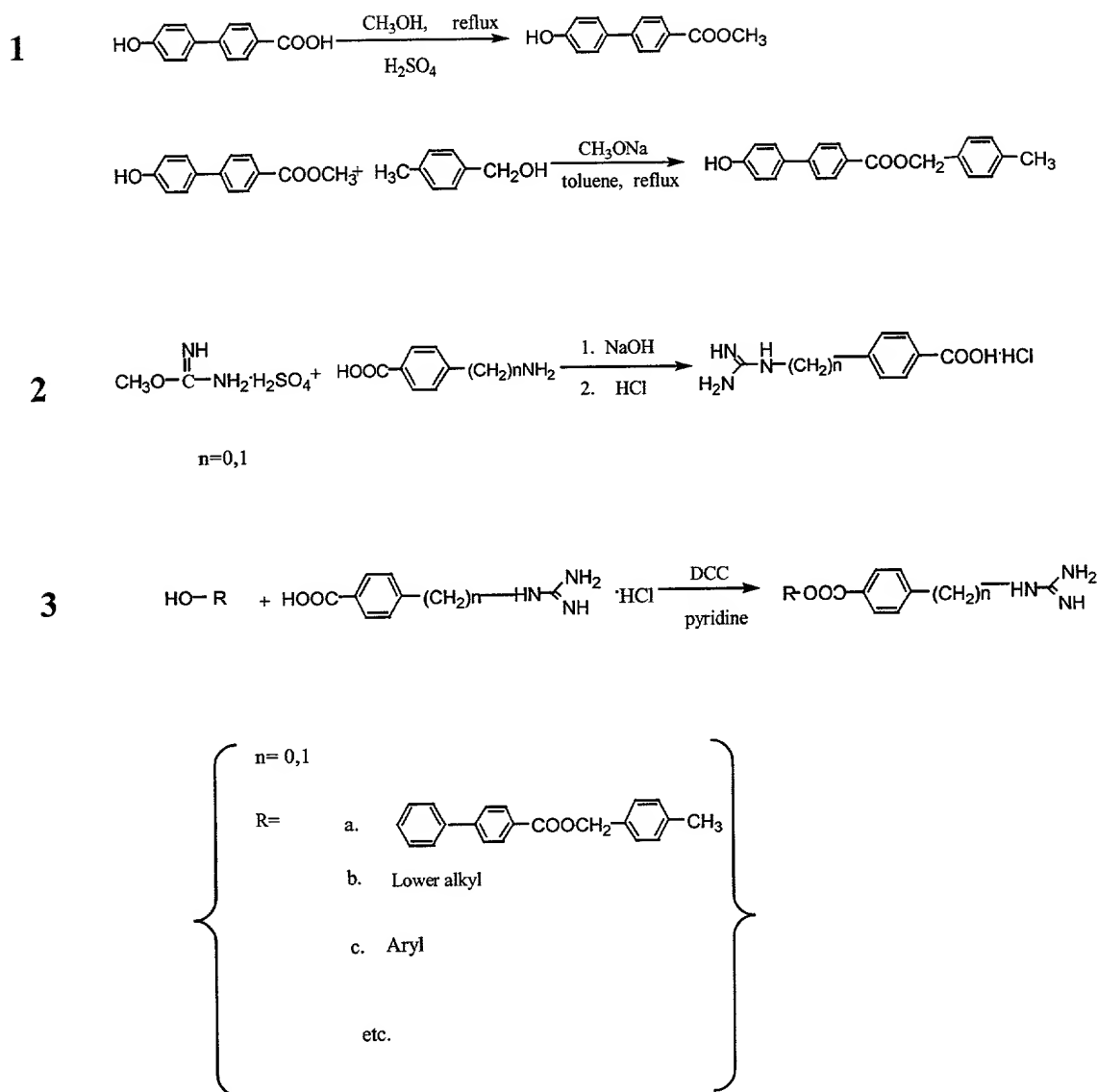
H. pylori infects approximately 60% of people throughout the world and is the most common gastrointestinal infection worldwide. Some people develop gastritis, peptic ulcers and even gastric cancer as a result of infection. As it is a spiral shaped, thickly coated bacteria, with several flagellae in its outer surface, it is very well adapted to the micro-environment of the upper gastrointestinal (GI) tract and hard to be eradicated.

Here we are aiming to synthesize series compounds, and have found that NE-2001



has specific and selective actions on *H. pylori*, and thus can be used in more cost-effective methods of multi-drug therapies.

Scheme of synthesis



5 Experimental Section

Instruments and reagents

HP1100 HPLC system, including binary pump, on-line degasser, auto-sampler, thermostatted column compartment, diode-array detector. The column is ZORBAX ODS (4.6*250mm). Mobile phase is methanol/water=90:10 (0.1% acetic acid). Flow rate is 1mL/min. The detector wave is 254nm.